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AN  
ACCOUNT  
AND  
METHOD of CURE  
OF THE  
BRONCHOCELE,  
OR  
DERBY NECK.

To which are subjoined,  
REMARKS on some PARTS of Mr.  
ALEXANDER'S Experimental Essays.

By THOMAS PROSSER.



LONDON:

Printed for W. OWEN, No. 11. in Fleet-street.

M.DCC.LXIX.

GOOD NIGHT  
AND  
METHOD OF CURE  
OF THE  
BRONCHITIS  
OR  
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REMARKS ON THE PARTS OF MR.  
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MDCCCXXXII.



TO  
Dr. HUNTER,

Physician to Her Majesty, &c.

SIR,

HAVING, as I think, according to your desire, sufficiently ascertained the method of cure of the ENGLISH BRONCHOCELE, which I sent you a report of about two years ago, and not being since able to find any thing that contradicts the truth of what I then said concerning it, that it was a disease but little known, and very seldom safely and agreeably remedied; and being now desired, with the view of utility, by my friends, with whom I first conferr'd about the cure of this disease, and from whom I received some useful hints, to make it

A

public,

## DEDICATION.

public, I am, Sir, in consequence of your patronage, encouraged to attempt the publication; and though I am far from being unacquainted with the friendliness and benevolence of your disposition, and especially your readiness to encourage and assist every useful endeavour in physic, yet I must beg leave to assure you, I was surprized at your goodness and generosity to a person you know so little of as myself, and that I am, Sir, with great respect,

*your most obliged,*

*most thankful,*

*and most humble Servant,*

Harpur-Street,  
May 1st, 1769.

**Thomas Proffer.**

P R E F A C E.

SOME years ago I had two near relations greatly afflicted with the disorder which is the subject of the following sheets, and was desired to attempt something for their relief: But having never seen any person cured of it, I was at a loss how to begin, and therefore searched the writings of such medical authors as I thought most likely to afford me assistance. But not meeting with all the satisfaction I wished for, I had recourse to several of my friends of the faculty, who gave me but little encouragement to hope for success.



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However, several medicines were tried with little or no benefit; till, after the repeated and unsuccessful use of a great variety, that method of treating this disorder which the reader is presented with in the following treatise, happily crowned our wishes with a complete cure of both my relations.

Since that time many cases of the very same nature have fallen under my care; and, wherever the age of the patient and other circumstances have allowed any hopes of a cure, the same process has never once failed. Pleased with this success, and encouraged by several friends, I conceived some thoughts of publishing the method of cure, together with the observations I had made in examining the writings of some of the most eminent medical and chirurgical authors; the greater part of whom I thought were  
deficient

## P R E F A C E

deficient in their description and method of treating that particular species of Bronchocele, which is the subject of these papers.

But before I could venture myself in publick as a writer, I determined to communicate the subject to some gentleman of eminence in the faculty; and to whom could I more properly apply than to Dr. HUNTER? a gentleman no less eminent for his readiness to promote every branch of the healing art, and to encourage every laudable attempt therein, than for his extensive knowledge of the animal œconomy, so necessary to qualify a person successfully to undertake the cure of its disorders.

The Doctor recommended a farther trial of the medicines, in order more effectually to ascertain their success. After this had been done, and the  
11 Doctor

## P R E F A C E.

Doctor was made acquainted therewith, he advised a publication of my description and method of cure of this disease, so common in many parts of this kingdom.

I hope I may not be thought tedious in transcribing the accounts given of the Bronchocele by those authors whom I have consulted on this occasion; as by thus connecting them with my own, the substance of what is most material upon this subject, is brought into one view.

The subject of some parts of Mr. ALEXANDER'S Essays, and the practical deductions to be drawn from his doctrine, are of such importance to the lives of mankind, that they certainly deserve the most serious and most accurate disquisition before they are brought into general use.

If



## P R E F A C E.

If the objections I have made to Mr. ALEXANDER's doctrine shall excite him, or any other gentleman of the faculty, so to investigate the subject, as to remove all doubt, all I intend by my remarks will be fully answered.

My brethren of the faculty, in general, I hope will be candid in their censures. The worthy and generous, I know, will be so ; and I hope there are few or none of a contrary disposition in so liberal a profession.

My chief intention in this publication is to add some little benefit to physic by an easy agreeable method of curing a disease hitherto generally, I believe, deemed incurable. And if, by so doing, the good of my fellow creatures is in any degree promoted, I am amply satisfied.

With .

## P R E F A C E

With this hope I overcome the imputation of vanity, the exposition of the narrowness of my abilities as an author, and every other dread that naturally attends a young man at his first appearing in publick.

All that now remains is to desire, That, if any person is disposed to exercise his criticisms upon me, he would only display them on the *Matter* of my Pamphlet, and not on the *MAN- NER*. In *That*, I persuade myself, I have been faithful, and can bear the test, however awkward and deficient in *This*.

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A C C O U N T  
A N D  
M E T H O D of C U R E  
O F T H E  
B R O N C H O C E L E.

**H**EISTER places the Bronchocele in the same chapter with strumous or scrophulous tumors. Almost all kind of tumors, says he, which are found in the anterior lateral part of the neck near the skin, are usually denominated strumous, or scrophulous; though there is a great variety and difference in the nature of those tumors,

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some



some being small, some of a moderate size, and others so much enlarged, as to cause stupidity ; some are soft or moveable, others hard or immoveable, some of a mild nature, and others of a malignant or cancerous disposition : But with regard to the cause of these tumors, they are usually form'd of indurated glands in the neck, as the small moveable glands, the superior and inferior salival glands, and sometimes the thyroid glands, which are by some strictly called scrophulous, or the evil, by the French Ecreuelles ; some of them are related to encysted tumors, and therefore contain a hard or softer substance like cheese, fuet, or lard ; but if a tumor arises in the anterior part of the neck from the resisting flatus, or air, some humor or accidental violence, as straining in labour, lifting of weights, &c. the disorder is then usually called a Bronchocele. In my opinion, says he, it should rather be termed Tracheocele. It is remarkable that some nations are quite free from this disorder, while others are grievously afflicted therewith, among which latter, we may reckon the inhabitants of Spain, Germany, Sweedland, Bavaria, France, Helvetia, and especially the inhabitants of Tyrole, who have these tumors but flaccid, sometimes in such a degree, that they

they extend to their navel, even down to their knees, as Metteenmyer says in his treatise on strumous and scrophulous swellings; the cause of which peculiarity in the spreading of this disorder, among certain people, is supposed to reside either in the air or waters of those countries, but in what manner they operate to produce such effects, has not yet been explained by physical writers, though we are furnished with many specious conjectures and opinions. These tumors rise in various parts of the necks of some women after a difficult labour. There is another difference in scrophulous tumors, that some are milder, and without any pain, while others are inflamed, painful, or indurated, so as to be scirrhus, and in some measure cancerous, obstructing the office of respiration and deglutition; but of whatever kind these tumors are, when they are once become inveterate, they are very difficultly, if ever, curable by medicines; but if they are recent, they may be sometimes dispersed, especially when the tumor is from an induration of the glands.

We are informed that the French and English kings have possessed a very easy method of curing

curing this disorder, barely by touching the parts affected, but we have not opportunity at present to enter minutely into this matter; they who are desirous of more, may consult Laurentius de mirabili strumas sanandi vi, solis Galliæ regibus divinitus concessa; as also JOHN BROWN in his treatise of strumous glands, where he vindicates the right and virtue of the royal touch to belong to the kings of England, adding many examples for the confirmation thereof.

In order to cure strumous or scrophulous tumors of the recent kind, nothing is more conducive than a proper regimen of dyet and way of living, especially when assisted with a good air, and the use of internal medicines, such as discutients, attenuaters, and cooling purges, ordered according to the age and constitution of the patient. The celebrated Mr. BOYLE greatly extols the *Ruta muraria*, as a specific in these disorders; SCULTETUS recommends pulv. lacertarum macerated in water and afterwards dried; or pulv. rad. zingib. turpeth. cum saccharo. Some prescribe burnt sponge, or pulv. ad strumas; others rad. scrophular. or decoct. lign. cum rad. bardano; but the internal means should



should also be assisted by discutient ointment externally, as

R Mercur. crud. ʒi terebin. ven. ʒij, subacti auxung. porcinae quantum sufficit pro unguento.

This ointment should be rubbed in upon the part every day for a considerable time, applying afterwards empl. de ranis cum mercurio, de cicuta; or diasaponis: but during the use of these it will be proper to give the patient a gentle purge once a week, to prevent the mercury from causing a salivation. There are also good affects promised from wearing a leaden collar, that has been mixed with mercury, especially when the scrophulous tumour or bronchocele is recent; at least it prevents them from growing bigger, if it does not intirely disperse them. There are some who advise to rub the tumor well with the hand or bone of a dead man, and others direct to more superstitious means, which they suppose to act by sympathy; but we must frankly own, our opinion is, there can be little or nothing in such a practice,

If the strumous or scrophulous tumor is of long standing, but moveable, it may be then better removed by the knife, than by medicines. The moveable tumors of this kind may be extirpated by the scalpel; while those which are fixed, and lie deep in the neck, cannot be safely removed without prejudice to the patient, unless they happen to be of the softer kind. In extirpating these strumæ or scrophulæ, there is no small danger of wounding some of the large arteries, veins, or nerves of the neck, by the scalpel, which would occasion death, or some very bad symptom. GARENGIOT and PETIT affirm, that no schirrhous, or indurated glands, detach any roots into the adjacent parts, notwithstanding they appear to be fixed or immoveable; and that therefore the immoveable kind of strumæ may be safely extirpated; but as they produce no instances of success from this opinion, there is no doubt but it will be objected to as precarious by the generality of prudent surgeons.

For the extirpation of moveable strumæ, there are three methods chiefly in use; the first of which is by ligature, when the strumous tumor hangs by a slender part like a stalk,  
which

which is not very frequent; but if the tumor is not pendulous, or if it be connected by a large root, it is then to be removed by the second method with a scalpel. In order to this a cruciform incision is to be made upon the middle of the tumor, down to its proper integument; then the wounded parts are to be separated by the knife from the tumor, which is to be afterwards taken hold of by the hook, needle and thread, or a convenient pair of pliers, and by that means taken out as we have directed before in treating of encysted tumors. During the operation an assistant is to dry up the blood, from the orifice of the wound, by repeated applications of lint or sponge, that the surgeon may have a clear view of his work; and if by accident, a large blood vessel should be divided with the root of the tumor, it is to be closed by applying *spt. vin. rect.* or some styptic and astringent medicine; and if these fail, a ligature or actual cautery; and lastly the divided parts of the skin are to be brought close to each other, by a piece of sticking plaster, and placed uniform, so as to unite without leaving a disagreeable cicatrix; the remainder of the treatment may be conducted as in other wounds.



I have several times opened some of the softer strumæ or scrophulæ either with a scalpel or caustic, and after discharging their contents, and cleansing the ulcer, have performed the rest of the cure as in other wounds.

As these tumors are usually without pain, it is not at all surprizing, that they should be neglected by the generality of people, who are both poor, careless, and fearful of the surgeon's hand, and that more especially if they think the tumor an ornament, like the inhabitants of Tyrole. If a patient should be desirous of being freed from this disorder without the knife, it may be done with caustics, as we have directed in tubercles and excressences, but you must be careful not to undertake this method of cure in any but the more soft and mild kind of strumæ, seated not near any large vessel, nor too deep in the neck, otherwise the tumor may be converted from a strumous to a cancerous disposition, or at least malignant symptoms brought on which would endanger the patient's life, by injuring the large veins, arteries, nerves, or trachea, seated in those parts.

HEISTER in his compendium of the practice of physic, and in the history of his own practice, gives a case or two under the article Bronchocele. A young woman, says he, about sixteen years of age, who had never had the menstrual discharge, had a tumor in her neck, which seemed to be scrophulous, about the size of a nut, which constantly appeared upon the encrease of the moon, and at the decrease gradually went off, and after taking for some time, strumous medicines, the tumour wholly disappeared.

In January and February 1719, says he, I publicly dissected a female subject, in which I found the thyroid gland very turgid, with a fluid, which made me hope that I should be able to discover some of its uses; for which purpose opening the posterior part of the trachia and œsophagus, that the cavity of these tubes might be exposed, I first pressed the gland gently with my hand, then more strongly, hoping by these means to squeeze out the fluid, either into the trachia arteria, or œsophagus, or both, but not a drop would pass, so that I am still doubtful of the use of this large gland; but upon cutting into the substance of

this gland, to examine it internally, a large quantity of a whitish fluid was discharged, with a great number of yellowish globules swimming on the surface, resembling small drops of oil. Whether these were the ova of VERCELLONIUS, or some other bodies, I will not take upon me to determine: I have, however, thought proper to insert this observation; perhaps future examinations of this gland may give us a better light into its nature and use,

In January 1719, I publicly dissected a female subject; in which I observed an extraordinary large thyroid gland. Of this gland, says he, I have treated above, of its form, size, situation, and use. I observed that this gland, in this subject, was larger and more swelled than common, and the external coat was so transparent, that we could through it observe a collection of an unusual particular fluid; and as VERCELLONIUS, an Italian anatomist, among others who have written upon the glands, inserts as a new discovery, That this gland was in a manner a nidus, filled with eggs of worms, which passing through invisible ducts into the œsophagus, and so the stomach, to animate as it were the chyle, and promote digestion in the stomach;



stomach; and that these ova, in their preternatural state, became worms frequently, I flattered myself that in this large gland I should find, if not all the appearances, yet some, or at least discover whether a fluid was here prepared to lubricate the trachia arteria and œsophagus. I opened several parts of the gland, where I perceived a quantity of fluid, and a thin watery transparent liquor was discharged, in which swam a great number of small globules, like drops of oil, of an orange colour. This gave me hopes of finding some of VERCELLONIUS's ova, and the ducts proceeding to the œsophagus, or, according to the opinion of others, to the trachia arteria; for which intent I opened the posterior part of the trachia arteria and œsophagus longitudinally, and pressed the gland gently at first, and more forcibly afterwards, to see if any fluid would pass into these parts; but notwithstanding this gland was so turgid and full, not any was discharged. As, therefore, we could not discover in this subject, where this gland seemed to be so very favourable for us, whether a fluid was excreted into the œsophagus, or trachia arteria, we still remain as uncertain of the real use of this gland, as we have been for a long time past,

HEISTER also, in his compendium of the practice of physic, has several chapters on the diseases of the glands; but mostly he speaks of scrophulous and cancerous diseases of the same. Indurated glands of the neck in children, says he, being generally owing to voracity and an unwholesome diet; by an alteration in diet, correcting the vitious humours, and more vigorous exercise, and by the strength of nature increasing as they grow up, they disappear; but often, however, this does not happen: but on the contrary, these indurated glands, in process of time, increase in bulk and number, especially about the neck, and thus increased acquire the name of scrophulous, and when still bigger are called *strumæ*, although often they be not indurated glands, but rather tumors shut up in a coat or bag, containing several kinds of vicious humours, which often grow to an uncommon size, and bring on many other complaints.

Lastly, It must be here observed, that in as much as most people are desirous of digesting and curing these tumors by external remedies only, and as this alone can hardly be expected to cure the internal depravation of the humours,  
this

this method of treating them generally makes them grow worse, wherefore I think we should principally rely upon internal remedies.

The remedies therefore, says he, which according to my judgment are the most proper for the softening and digesting an induration of the glands, are such as follow.

First, Infusions and decoctions prepared from resolvent herbs, roots, and woods, and taken twice or thrice a day, a decoction of guaiacum wood, with liquorice root, or infusion or decoction of rosemary with sugar is recommended, and with reason, for digesting the tumified glands of the neck, by KUCKLER, a physician of Leipfic, in his treatise on tumors of the glands of the neck in children; and this is particularly of great efficacy in girls nearly adult, but who have not yet had the menses; but a proper dose of tincture of antimony, or essence of the woods, or of amber, completes the cure more effectually, given along with the other remedies.

Secondly, Attenuating powders are proper to correct the viscid blood, to which a grain or two of cinnabar or calomel may be added in each



each dose of the powder. This is an excellent resolvent of scrophulous tumors, when small, and not of long standing, in childrens necks; a scruple or half a scruple of powder of millepedes also, with a grain or two of calomel, is of very approved efficacy, both in tumors of the external glands, and also in hard tumors of the viscera, especially if a proper mercurial purge be given every three or four days. But all these remedies must be persisted in for a long time, especially where the disorders are inveterate; and salivation, at least to any considerable degree, is to be avoided.

For the purpose of resolving recent indurations of the glands and schirruses externally, he recommends fomentations of warm spirits of wine, or the camphorated spirit, used several times a day; and likewise resolvent mercurial plaisters, or hot digestive bags, filled either with fragrant herbs and flowers, or warm ashes, or salt and sand. Hence DEIDER greatly recommends warm sea sand for schirrous breasts, and acid steams are greatly recommended by some; but if all these, says he, as not seldom is the case, prove of little effect, the tumors may be cut out, if the place  
where

where they are, and the nature of the disorder be such, as to admit of extirpation.

CELSUS's account of the Bronchocele is thus :  
 In the neck between the skin and the wind-pipe a tumor arises, in which there is contained sometimes insensible flesh, at other times a humour like honey and water, sometimes also hairs mixed with small bones. Whatever it be that is contained in the coat, it may be cured by caustic medicines, which burn the surface of the skin, together with the coat below it. When this is done, if it be a humor, it runs out ; if it be any thing substantial, it is taken out by the finger, then the ulcer is healed by the lint ; but the cure by the knife is more expeditious. An incision is made in one line in the middle of the tumor down to the coat, after which the morbid body is separated by the finger from the sound parts, and is taken out entire with its coat ; then it is washed with vinegar, to which either salt or nitre has been added, and the lips are joined by one stitch ; the other applications are the same as are in other futures ; afterwards it must be bound up gently, lest it press the fauces ; if it should happen that the coat cannot be taken out, we must

must sprinkle escharotics into it, and dress it with lint and other digestives.

ALBUCASIS treats of the Bronchocele, or a rupture in the fore part of the neck, which he says is most frequent in women, and is the only one, says the translator, I think that distinguishes between that which is natural and that which is accidental. The first sort is not to be touched; of the second there are two species, one like a tumor, which contains some gross substance; the other like an aneurism. But though he is so bold in using the knife, he advises the operation only in the former case; and even not there neither, unless the tumor be loose and little, and inclosed in a cystis. This sort of swelling may no doubt be removed by art. Sometimes these excrescences are full of water, sometimes they have nothing in them but air, and these cases may likewise be removed by incision, friction, or impression; sometimes they turn to a fleshy substance, which lying between the skin and the wind-pipe, resemble a flap or dew-cap hanging out, just like that of a turkey cock when he is angry. This is a frequent distemper in those countries where they drink large quantities of cold



cold water, especially where they do not cool their water in snow, as in other warm climates, but pour ice into it, as is the way with the common people who live upon the black mountains of Genoa and Piedmont. The matter of fact is as true, as that they themselves attribute it to the drinking of this water; and from the nature of cold, it is not difficult to account for this effect: For the liquor in going down must needs chill the muscles of the throat; that is, it contracts the vessels, and thickens the humours which circulate through them at the same time; from whence must follow a stagnation or obstruction, and afterwards a swelling in those parts: And it is remarkable, that tumours, which owe their origin to this cause, are, and always continue, fleshy; whereas other Bronchocèles, which proceed from strains, bruises, and such like accidents, often suppurate, or turn to a meliceris, steatoma, &c. Among the Spaniards, who indulge themselves immoderately in the use of cold liquors, swellings in the glands of the throat are very frequent; and that the coldness not only of the liquors, but of the climate itself, may produce these effects, seems to be plain from the observations we find in writers, that these swellings about the throat

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and head, are much more frequent among the northern nations, than the southern.

In FRIEND's history of physic is this account of the Bronchocele. Tumors very often happen in the thyroidal glands, but such a swelling is not properly a Bronchocele, though sometimes so miscalled, but a struma or scrophula colli. In morbid bodies I have seen these glands enlarged to an extraordinary bigness, so as to reach down almost to the clavicles, and in such cases they generally turn schirrous. When the swelling here is thus confirmed, we may easily learn from anatomy, were we not warned of it, that the distemper is in its own nature incurable; for I believe neither any inward medicine, nor outward application, can dissolve it, and repellents would rather do mischief, and throw the humors upon some other part; neither would any prudent surgeon, I presume, attempt to extirpate such a large tumor, for fear of cutting an artery, or vein, or the recurring nerve. And ALBUCASIS gives us a sufficient caution, in telling the story of an ignorant operator, who, in this case, by wounding the arteries of the neck, killed the patient upon the spot.

In

In TURNER's surgery — the Bronchocele is a tumor situated upon the investing membrane of the wind-pipe, or betwixt that and the muscles of the said part, where it sometimes takes so large a compass as to extend itself from one jugular to the other, lying high and prominent, like a semisphere, or half globe, or at least of a spheroid figure. It takes its rise commonly from loud crying, coughing, and vomiting, as also from a sudden jerk, or hasty turn of the neck, as I have been informed by some therewith affected. It is called also Hernia Bronchialis; but if there be a rupture in the case, as that name will imply, it is most likely to be that of some lymphatic vessel, diffusing or shedding its contents betwixt the membranes of the aspera arteria, and the muscles incumbent; where being leisurely accumulated, it distends the containing parts, and from the broken fibres thereof, makes itself a cover, which grows along with it in like manner as the other capsulated tumors.

There are others who derive their origin from some nutritious juice extravasated, and turning into a flesh-like substance, after the manner of certain other sarcomata: and in-



deed both these may be right, since we often find the body thereof made up partly of a fluid, and partly of a more firm and glandular substance,

But to proceed to the prognostic and cure thereof. The Bronchocele, by reason of its unhappy situation among the large blood-vessels, the recurrent nerves, and wind-pipe itself therein concerned, at least its investing tunicle, affords a very hazardous and uncertain issue. And if it admit not of discussion, there is little encouragement to meddle farther : for if it suppurates, there is left commonly a very sordid and sinuous ulcer; which since you cannot dilate so conveniently as in other parts might be done, nor have any advantage by rolling, which the same will not allow, you may be put upon risking your patient's life, or leave him in a condition worse than you found him, with an incurable gleeing fistula, or disepulotic ulcer : so that if any thing be done in order for the cure, it ought always to be attempted first of all by some proper discutient. But, indeed, these tumors are most commonly left to themselves; the great danger by incision on account of their situation, and the difficulty of healing  
when

when they come to suppurate, having very much discouraged their undertaking; wherefore the much greater number now content themselves without any surgery, when apprized of their stubborn nature, and the uncertainty of success.

It is much more rare to find these tumors in the necks of men than women, or at least being less obvious to sight, they pass unheeded, and we are not so often consulted about them. I am sure, to one that I have observed in our sex, I have met with half a dozen on the throats of women.

I was formerly, says TURNER, acquainted with a woman who was in great reputation for resolving these tumors; her secret consisted in anointing the part frequently with oil of chamomile made by infusion. But the most celebrated remedy for this disorder, is one which is sold at Coventry, and which is kept a secret by the preparer. It is ordered to be laid under the tongue every night going to bed. I am pretty well informed that this secret remedy is thus prepared. Take of sponge, cork, and pumice stone calcined, each equal parts;

parts ; half a dram of this is mixed with sugar, and with the addition of some syrup or conserve, is made into a bolus, and laid under the tongue every night. What makes me the more inclinable, says he, to believe this the true Coventry receipt is, that MUSITANUS, as I remember, has one much like it, which he directs to be used in the same manner for such tumors ; and I remember there is a receipt in some of the old German dispensaries not very different from this, with an addition of the *pilæ marinæ*, which is ordered to be laid under the tongue, as a remedy ad Botium (for the Bronchocele) but I cannot at present recollect the author. RENODAU also gives a receipt for the same purpose, which he intitles Pulv. pro Botio D. D. Wolfgangi, Gabelchoveri ; as thus, Take of sponge and lapis calaminaris calcined, each two ounces, of pumice stone, and lapis spongiæ, each four ounces, fine sugar three ounces, mix and make a powder ; but they all agree in making the sponge a principal ingredient,

In WISEMAN's surgery is an observation or two on the Bronchocele, or rather on tumors, which he improperly calls the Bronchocele.



A maid, says he, aged about thirty years, of a tolerable strong constitution, came to me with a complicated tumor lying on the left side of her neck, from her ear to her aspera arteria, and so stretching over it upward to the other side of the neck; it was soft, and seemed to be full of matter, but without inflammation. I made a puncture into the body of it, and discharged a stinking serum, not unlike horse-piss; that being let out the tumor sunk, and felt unequally hard. I dressed it up with a pledgit of ungt. Basilicon and empl. diachalcit. The next day taking off the dressings, and seeing the swelling lank, I applied a caustic the length of two inches, about three fingers breadth from the ear. The eschar I divided, and discharged a foul matter, and afterwards dressed it up with dossils dipt in mercur. præcip. with lenients over the eschar, and from that time hastened the falling off of the slough. After the separation of it, I thrust out a different sort of matter, not unlike that of an ætheroma and meliceris mixt together. I passed in my probe-scissars, and laid it open downwards to the aspera arteria, and pulled out with my fingers several vesiculæ, some containing a foul serum, others a gritty substance. There also  
came

came away gobbets of flesh, with which the basis of the abscess seemed to be covered. Having thus cleansed it, I filled it up with doffils dipt in præcipitate, and kept the lips dilated, repeating this method of dressing every other day, and rubbing the strumous excreffences with the vitriol stone. The sinus contracted narrower within, but the original of this tumor being strumous, it would not heal whilst there remained any hollownes, but filled with that sort of flesh, and raised a tumor; upon sight whereof I applied a caustic upon the upper part, towards the ear, and divided it with a pair of scissars; then filled the sinus with mercur. præcipitate, dressing the lips of the ulcer with digestives. After the eschar separated, I applied my endeavours to eradicate the strumous flesh with the vitriol stone and præcipitate, and cicatrized it from the ear downwards, yet not without some difficulty, the basis proving false more than once, in one part or other. Some of this strumous flesh rising amongst the vessels, and emitting over them, made sinus's so deep, that I much doubted how to divide those without danger of these vessels: But there being no cure to be expected whilst this remained, I passed a ligature with a small probe under the  
fungus,

fungus, and by deligation of it, and application of præcipitate, I consumed the fungus, and laid the deepest of them open, and afterwards by the application of Epulotics, brought a cicatrix upon them. Having thus well near healed the abscesses to the aspera arteria, I laid the other side open, and eradicated that part by the same method as the former, and cicatrized it smooth.

Another young woman, says he, about fourteen years of age, came out of the country, recommended to Sir ALEX. FRASER, with a complicated tumor of a great bulk on the left side of her neck and cheek, arising under her ear. It had been growing many years, and was without inflammation. After she had been prepared by a purging apozem and antistrumatics prescribed by her physician, he commended the extirpation of it to my care. Accordingly I met him at her chamber; we designed the taking it out by incision, and to that purpose, having all things ready, I made an incision into it; but the blood trickling fast down, we forbore the operation that time, and dressed it up with astringents. The second day after we met again, and in taking off the

E

dressing



dressing saw it had not bled; nor was there any  
 pulsation to be felt in it, whereby we might  
 suspect any considerable flux of blood; what  
 did flow proceeded, as we suppose, from some  
 small fungus: Upon which consideration we  
 resolved to eradicate this preternatural tumor  
 by escharotics, and began with the application of  
 a strong caustic on the middle of it, according  
 to the length of the tumor. The next day we  
 divided the eschar; and filling it full of his pulv.  
 fine pari I embrocated the parts about, and  
 dressed the eschar with ung. Basilicon, &c. By  
 the application of this powder we penetrated  
 into the body of the tumor, and after separati-  
 on of the sloughs, seeing no danger of its bleed-  
 ing, we repeated the use of the pulv. fine pari,  
 and having thereby discovered the tumor to  
 consist of many several species, viz struma,  
 ætheroma, meliceris and steatoma, we laid it  
 more open by incision, and with a crooked  
 spatula, and our fingers, pulled out some of  
 them in pieces, others whole in a cluster; then  
 filled it again with the said powder, and dress-  
 ed the divided lips with doffils spread with  
 digestives.

By

By this method we eradicated this great body, but in our approaching near that part of her cheek, which had bagged so long time between her jaws, we found it penetrated, and the liquor she took in her mouth, diffusing itself into the abscesses; also the matter made in the abscesses discharging itself into the mouth. Whether this opening was made by the teeth, or fretted by the acrimony of the humor within, I shall not dispute, but it contributed much to the forwarding of the cure there; for by injections deterfive and drying we cleared that part of the ulcer, and cicatrized it with the external part of the cheek, so close, that her jaws were at liberty to chew her meat, which they had not been in a long time before.

The last difficulty was in eradicating that part which lay in a manner round under the root of the ear, threatening the very organ; we laid it open and by the milder escharotics at length eradicated the strumæ there without offence to the organ, cicatrizing it smooth the whole length of the ulcer, by bringing the lips together within a narrow cicatrix to the satisfaction of her relations.

During the application of some of the escharotics, she was subject to a palpitation cordis, and did somewhat salivate, but was therein relieved by Sir ALEX. FRASER's prescriptions, and restored to perfect health, which I have lately heard she yet enjoyeth.

PAULUS ÆGINETA on the Bronchocele, says, the tumor of the neck oppressing the wind-pipe, which is called Bronchocele, is a large and round tumor on the fore part of the neck, (called Bronchocele from its situation) there are two kinds of this tumor, for one is of fat, another happens from the dilatation of the parts, and this we shall remark as aneurismal, and avoid meddling with as desperate, not as aneurisms in general being dangerous, but especially those arising about the neck on account of the largeness of the arteries; those occasioned by fat should be cured as steatomatous tumors, being separated from neighbouring vessels, after the same manner we have taught in strumous swellings.

“ PAULUS ÆGINETA, de asperæ arteriæ  
 “ tumore qui Bronchocele dicitur, — Grandis  
 “ in cervice et rotundus fit tumor, nomencla-  
 “ turam



" turam ab internis partibus fortitus, duplex  
 " ejus tumoris differentia est, alius enim adipe  
 " tumet, alius partium illarum dilatatione ac-  
 " cidit ; atque hunc, notabimus veluti ut an-  
 " eurismata, desparatumque fugiemus, non a-  
 " liter ac universa aneurismata quæ periculo-  
 " sam habeant administrationem, præcipue  
 " vero quæ circa cervicem oriuntur, ob arte-  
 " riorum magnitudinem, qui adipe inturgescit,  
 " ita ut steatomata curari debet, discretis, præ-  
 " teritisque vasis, eo nimirum modo quem in  
 " strumis exposuimus."

The scientific SALMON says, the Broncho-  
 cele is a bunch or cluster of swellings in the  
 neck, and as a remedy recommends a tincture  
 of sponge.

Dr. SMITH in his general system of physie  
 lately published reckons this disease a species of  
 dropsy. If, says he, the exhaling arteries of any  
 cavity throw out too much, or if the absorbent  
 power of the veins be weakened, or if both  
 these happen together, a watery fluid will be  
 collected in it, and in this way are produced all  
 the different species of the dropsy, as the an-  
 sarous or leucophlegmatic, cedematous, and  
 other

other dropfical fwellings, the afcites, tympany, hydrocele, hydrops pectoris, Bronchocele &c. When the blood is thin and watery, and the veffels weak, the anafarcous, cedematous, and other dropfical fwellings are common; for as the bibulous veins can only take up fluids in proportion to the depletion they fuffer by means of their own vibratory contractions, and alternate compreffion of the neighbouring arteries and mufcles, their abforbing power muft neceffarily be leffened in a lax ftate of the fibres, where thofe caufes are much weakened.

In his defcribing the different kinds of dropfies, he fays, there fometimes is a watery fwelling in the throat like a rupture, called a Bronchocele, occafioned by the ferum collected and ftagnating in the interior and conspicuous part of the afpera arteria; this fpecies of dropfy is eafily known, and it is cured by puncture and difcutients, as the cicuta, and by deriving the humour from the part affected.

#### R E M A R K S.

HEISTER's account of this diforder I think is not fo good, as one would expect from fo  
great

great a man, and in his history of his own practice, which he says he wrote at upwards of seventy years of age, he does not give one instance of a cure.

The translator, I think, has mistaken the sense of the author in saying some are enlarged so as to cause stupidity; instead of stupidity surely it should be translated a stupor of the part. [*Quædam vero insigniter atque vel ad stuporem increfcunt.*] I think it odd, his making some accidental violence, as straining in labour, lifting of weights, &c. a principal cause of this disorder, and saying some nations are quite free from it, when one must suppose the people of all countries are nearly alike liable to such injuries, from strains in labour, lifting of weights, carrying of burdens, &c. Those he speaks of, as of the kind of encysted tumors, and containing a harder or softer substance like cheese, suet, or lard, are generally, if not always, accidental tumors, from the rupture of some vessel.

I think most of our late English writers, who take notice of this disorder, have copied from this account of HEISTER, especially those compilers who give their works the recommendation of  
their



their having collected the best things, from the best authors, in all languages.

In the two late Dictionaries of Arts and Sciences, they have it thus, The Bronchocele is a tumor arising on the fore part of the neck, from the resisting flatus, or air, some humor or accidental violence, as straining in labour, lifting of weights, &c.

This disorder with us is frequently called a Derby-neck, on account of the inhabitants of that county being much subject to it, probably for the same reason that the inhabitants about the valleys of the Alps, and other mountainous countries, are so much affected with it, namely, the air or waters of the country. But it has not been explained, in what manner they operate to produce these effects.

This tumor, when once become inveterate, is very difficultly if ever curable by medicines; but may be dispersed, if it is recent. A leaden collar, mixed with mercury, prevents it from growing bigger, if it does not entirely disperse it. Some advise to rub it well with the hand or bone of a dead man, and others direct to  
other

other superstitious means ; but the most celebrated remedy is one that is sold at Coventry, and kept a secret by the preparer ; it is ordered to be laid under the tongue every night upon going to bed.

The instances HEISTER has given of enlarged thyroid glands, which he examined by dissection, I judge to have proceeded from the extravasation of some tumor, by the rupture of a vessel in the part. And though he seems to be very punctual as to the time of those dissections, he does not say any thing of the age of the patient, and that of the disease ; which, I think, would have been more to the purpose if it could have been learnt.

Dr. DOUGLAS, some years ago, presented a report to the Royal Society of the appearance of the thyroid gland extraordinarily enlarged in a patient he dissected, where he found different kinds of matter, some hard as cheese, other softer, like honey, or more fluid, like honey and water ; and this enlargement of the gland, the Doctor observes, was occasioned from violent strains in a difficult labour, many years before.

There

There is nothing to be learnt from what CELSUS says on this disease, and the tumors sometimes containing as he says, hairs mixed with small bones. I think it an odd circumstance, and cannot conceive how hairs and bones can have got into the tumor, or tumified gland; unless from too violent a forcing down of the \* *Ventriculi excutia* the gullet has been perforated, and some of the hairs of the brush have remained in the orifice, and by degrees have worked their way forwards: in this case some small bones must have followed the hairs before the perforation occasioned by the forcing down of the brush was closed, and in length of time the hairs and bones may have occasioned a tumor, or they may have penetrated into a tumified gland, and have been buried there.

ALBUCASIS's account of the *Bronchocele* is far from the worst; his observation of its happening mostly to women, and his distinguishing between the natural and accidental *Bronchocele*, I think is worth all I have seen written on it besides; and as he has been so far observant I wonder he did not remark the time of its

\* A stomach-brush formerly made use of to cleanse the stomach with.



its first appearing, and that of its growing; which, if he had done, I think he would have given a very just description of the disease: But what opportunities he might have, by the frequency of its happening, of making observations of every particular belonging to it, in the country he wrote and lived in (Arabia) I cannot be a judge, though I should imagine it was pretty frequent, from his noting its happening mostly to women.

But I cannot agree with him in its being occasioned by the drinking of cold water; because the water, or whatever is drunk, however cold, passes so quick down the gullet, that it cannot be supposed so to affect the glands of the neck this kind of swelling happens to: And was it so, I should think it would happen as frequent to men as women, as their throats would be as much chilled by the water as womens. But I think the distance of time betwixt this gentleman's writing and mine, which I believe is more than five hundred years, has given good proof of its not being occasioned by drinking of cold water, namely its never happening again when once cured; for were those swellings occasioned by the drinking

of cold water, why may they not be occasioned again and again in the same subject from the same cause?

TURNER's description of this disease, I think but indifferent. An enlarging of the whole thyroid gland, which I take to be the true Bronchocele, will extend, as he says, from one jugular to the other, and it appears in form something semispherical, or half globular: But this is the appearance of the spontaneous Bronchocele.

Those swellings of the neck that sometimes happen from loud crying, coughing and vomiting, or any violent strains, are not so equally prominent and occupying, but more bulging and confined to a part.

As to what he says with regard to cure, (as a Surgeon) I think much to the purpose, but he might have said instead of its happening six times oftner to women than men, it happens to six hundred women for one man.

Neither of the cures WISEMAN has given under the name of Bronchocele, I think are properly that species on which I treat; both  
the

the situation of the swellings, and the different kind of matter therein contained, I think evidently shew the contrary.

The famous antient Greek surgeon PAULUS, I think has not been of any great use in what he says of this disease. He seems to depend wholly for a cure, on manual operation, and local application ; and as I could not procure a translation of his work, but was forced to use my own, I have thought fit to insert the latin copy.

Mr. SALMON's description of the disease, and the efficacy of the medicine, he recommends as a remedy, I think nearly of a par. This gentleman was vastly fond of employing a great deal of art to render useless the noble productions of nature ; and this I think one instance in his tincture from sponge, which can be of no more service in such a case, than a bread poultis would be of towards curing a carinomatus fore leg.

The Bronchocele, or Derby-neck, is a tumor arising on the fore part of the neck. It generally first appears sometime betwixt the  
age



age of eight and twelve years, and continues gradually to encrease for three, four, or five years ; and often the last half year of this time, it grows more than it had for a year or two before. It generally occupies the whole front of the neck, as the whole thyroid gland is here generally enlarged, but it does not rise to near so high as the ears, as in the cases WISEMAN speaks of, but is rather in a pendulous form, not unlike, as ALBUCASIS says, the flap or dew-cap of a turkey-cock's neck, the bottom being generally the bigger part of the tumor, and going gradually less upwards. It is soft, or rather flabby to the touch, and moveable ; but when it has continued some years after the time of its growing, it gets more firm and confined.

By the situation and nature of the complaint, it occasions a difficult breathing, and very much so upon the patient's taking cold, or attempting to run or walk fast. In some, the tumor is so large, and so much affects their breathing, as to occasion a loud wheezing. It very rarely happens to boys, indeed I have never been able to make out one instance of it, in a man or boy.

It

It is very common in many counties in England, Derbyshire especially, where from its frequency it has the name of Derby-neck, and some other countries are almost free from it. I have been informed by a gentleman of the faculty, from Duffield in Derbyshire, that there were near fifty poor girls afflicted with it in that small village.

Now I think all afflicted with this disease, whose circumstances will not afford a trifling expence to procure such medicines for their relief, as require no confinement, or hardly any other restraint from the usual way of living, should be furnished with the necessary remedies at the expence of the parish, as well as a poor creature is provided with a wooden leg, that has the misfortune of losing his own. Those, like myself, born to the fortune of labouring for their livelyhood, provided they are blest with health, their condition may not be the worst; but by the affliction of a troublesome disease, to have their labour rendered painful to them, must make their lives in a degree miserable.

Most

Most medical authors, that have said any thing of this disease, seem to make it a scrophulous complaint; but I think very improperly; as clean habits, and as free from any other scrophulous symptom as can be, are subject to it; and surely it cannot be denied, but boys are as subject to scrophulous disorders as girls. But though I think its happening only to girls, a proof of the Bronchocele's not being a scrophulous disorder, yet I cannot give so good a reason for its happening to young women only, except their being of a more lax and delicate constitution, especially about the time of its first appearance, may be thought so.

It has been observed, that the drain of an issue, or that of a perpetual blister, applied on some other occasion, has prevented the growth of the Bronchocele; the issue or blister being dried up, the tumor in the neck would encrease faster, and upon the issue's being opened again, or the discharge of the blister, it would be somewhat sunk, or however its getting bigger be prevented.

If the tumor of the neck is but inconsiderable at the breaking out of the menses, it  
sometimes



sometimes by degrees goes quite off; and often this change in the constitution does not seem at all to affect the tumour of the neck; but it continues to grow as before. And whatever be the true cause of this disease, and that of its happening so much more frequently in some places than others, it seems however from the time of its appearing, and its manner and long continuance in encreasing, ever to proceed from the same origin, I mean the natural or spontaneous Bronchocele: So that however many, or most diseases may be altered in futurity, by the weather, or temper of the air, (and nameless other circumstances which we probably never can make ourselves acquainted with,) this will ever be the same as to cause, subsequent symptoms, and consequences: And therefore the remedies, once proved safe and successful, will ever be so.

And as the great difficulty and excellency in physic is in the distinguishing one disease from another, especially those that appear similar, though vastly different in their true nature and disposition\*, so the medicines that prove almost

G

infallible

\* Those who are not sufficiently satisfied of this, may  
be

infallible in that kind of Bronchocele, I have been describing, will be of no use in those swellings of the neck that sometimes happen from violent strains, though they appear something like the natural Bronchocele.

And as physic has ever been esteemed, and no doubt is a matter of the greatest moment, all in or out of the profession are fond of excelling in the science. Our greatest folks are fond of laying up with their choicest treasure, the receipt of a sovereign remedy, if it be but for kibe heels, or chapp'd lips; and indeed in those so obvious complaints, they can hardly err in the applications of their remedies; but in greater or more intricate disorders, to our advantage, they do not often succeed so well: for it will be of but little use to any one, to be acquainted with a very good remedy for the pleurisy, unless he can distinguish that  
disease

be convinced in the matter by perusing Dr. FOTHERGILL's treatise on the ulcerated sore throat, where they will meet with too many melancholy proofs. And as many more have happen'd, a great many more would have happen'd had we not received the Doctor's timely, accurate, and ample instructions in this difficult matter.

disease from flatulent or spastic pains of the side.

But having I think given such a description of the natural or curable Bronchocele, as will enable any one to know it from other complaints something like it, I proceed to the cure, which when the disease exactly answers the description I have given of it, and its continuance has not been too long, I think I may say will very rarely fail,

I have known several completely cured at very near the age of twenty-five years, which was more than twelve years after the first appearance of the tumor of the neck; but yet at that age, I believe the cure is uncertain, and beyond it, though but a very few years, more doubtful.

I have tried the remedy on several, at the age of seven or eight and twenty, but never with success, though it may, I believe, happen so, if the tumor appears not very firm and confined, but rather flaccid and yielding.

Many



Many no doubt lead miserable lives, under the almost intolerable torments of some tedious perplexing disorders, such as the nervous kind, for want of pursuing long enough, let the remedies applied be ever so proper and likely, for them to receive considerable benefit. It is supposed no one can object against the medicines prepared here for their cure, on account of time, or other observations necessary in their use, when they are informed a month or six weeks at farthest, is the longest time, and no confinement, or hardly any other restraint from the usual way of living, is required.

Let one of the following powders be taken early in the morning an hour or two before breakfast, and at five or six o'clock in the afternoon, every day for a fortnight or three weeks. The powder may be taken in a little sugar and water, or mixed with a little syrup, or any thing, so that none is lost.

R. Cinnab. Antimon. opt. levigat. ℥j.  
 Milleped. pp. & pulv.  
 Spong. calcin. aa gr. xv. m. f. pulv.

After these powders have been taken for the time mentioned, the patient should omit them  
 for

for about a fortnight, and then begin with them again, and take as many more after the same manner, and also at bed time every night during the second course of the powders, three of the following pills are to be taken.

R. Pil. Mercurial. ph. nov. 3ls.

f. Pil. n<sup>o</sup>. 48. æquales.

These medicines generally agree so well, that the patient is neither troubled with sickness nor any inconvenience from their use, nor is any confinement necessary, unless they are taken in severe weather, and then it may be only to the house; nor need the diet be much regarded. Indeed I think it sufficient, that the medicines be taken in a temperate season, or rather warm weather, and the patient lives exactly in the usual way, taking some care against catching cold. And if meat be eaten only every other day, and toast and river water, &c. drank instead of malt liquor, it will not be the worse; nor can the medicines ever succeed better than I have known them several times, when there was no difference at all made in the way of living. If the pills purge, two only should be taken, and if more, than

an

an extraordinary stool a day is occasioned by them, the dose must be reduced to one, and continued so till the pills are all taken. In general it will be proper for the patient to be purged twice or thrice with manna and salts, or any gentle cathartic, before the powders are begun with. The medicines are here proportioned for an adult, of a good constitution, therefore if the patient is younger, or of a weakly habit, the doses must be managed accordingly.

The patient is not to expect to find much benefit in a little time: perhaps it will be as long after the medicines are all taken, as the time they are in taking, before much difference will be perceived in the tumor of the neck. It is necessary that the medicines be begun with at a proper time, especially the second course; a few days should always be dispensed with upon that account.

As to external application, I have never made use of any, nor would I advise the use of any, as I think none can be of much service. Many recommended I should suspect of doing harm, such as fomenting the part with warm vinegar;



vinegar ; which by its hardening the gland, though it may somewhat lessen it, would render it more difficult if not incapable of being quite reduced to its proper state. But if any local application be made, I believe none better than rubbing the part every morning with fasting spittle ; and dry friction, I should expect, would do as well, as the good, if any is produced by this means, arises wholly from the friction and pressure upon the gland.

I have been informed by a gentleman, whose information I think I may depend upon, that a relation of his, a young man of about twenty five years of age, was cured of a tumor on the fore part of the neck, by his chewing tobacco. If it was so, and the chewing tobacco would cure the Bronchocele, I think if another remedy be known, that should never be used, as thereby young women might get such a habit of quidding, as they could never leave off.

Tumors of the neck are said to be very common in many parts of Italy, about the Alps especially, (as *quis tumidum Guttur miratur in Alpibus*) is a very old remark. About Turin also they are said to be frequent, and in many other

other places of that country, particularly near the rivers Po, and Doria; but how far they agree with the tumor of the neck, I have given an account of, as to the time of their appearing, and that of their encreasing, &c. I have not been able to make myself acquainted with, therefore I have called the disease here treated of, the **ENGLISH BRONCHOCELE**.

**REMARKS**

## R E M A R K S

On some PARTS of

Mr. *Alexander's* Experimental Essays,

Publish'd last Year.

**O**F the ingenuity of the work I do not doubt; but of the utility I have no hopes. The importance of the subject, (on putrid diseases) I suppose no one will think little. But in the first place, I think Mr. ALEXANDER seems to conclude putrefaction in living and dead bodies alike, which, I suppose, is very widely different. Every one knows that salt-petre, or sea salt, will preserve meat from stinking; but if nitre is good in putrid diseases, my notion of the matter has been very erroneous: but however strongly Mr. ALEXANDER seems to recommend it, I am apt to believe he has never yet tried his method of using antiseptics, on a living creature in a putrid disease.

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To



To shew the propriety of the method he recommends, he has salted some dead bodies, and also living \* ones, and killed them presently after, whilst the carcase of the animal was well charged with the salt he used ; and the creatures so served remained fresh and sweet much longer than those killed without being salted. And what is there new in this ? or what allusion has this to putrid diseases, when I have said, and am pretty clear in it, that the putrefactive principle in living, and that putrefaction that happens to all dead unsalted carcases, is materially different ? Every one knows the use of salt in preserving dead flesh sweet ; but there is no occasion for salting living creatures, because there is always time enough after they are killed before they begin to putrify. Putridness comes on fastest in dead flesh in hot weather ; but provided the air is pure, the heat of it does not seem to occasion putrid diseases ; and heating medicines are always proper in such disorders, and the patient becomes cooler, and the pulse quicker, by their use : and cooling medicines in these disorders increase the heat of the flesh,

\* By means of immersion in a bath of a solution of nitre.

flesh, and the quickness and weakness of the pulse: nay, as says Dr. FOTHERGILL, (on the putrid sore throat) this effect of the medicine is a proof of the disease, and of the opposite difference of the nature of putrid and inflammatory disorders.

And as the same things which prevent putrefaction in dead bodies have no such effect, or rather promote it in living creatures, the putrefactive principle surely must be different; or however that, or the difference between the living and inanimate substances, the anti-septic is used to occasion its having a quite contrary effect; but, perhaps, the contrariety of the effect of the antiseptic may arise from the different state of what it is applied to, in living or dead matter.

I think I have never seen nitre recommended in putrid diseases by any one, except Mr. ALEXANDER; and I think it is pity he had not tried its effects in a putrid disease before he had recommended its so liberal use, as its being effectually antiseptic of dead flesh is by no means a conclusive argument of its being good in putrid distempers: for the most

noxious substances known to a living body, as even arsenic and corrosive sublimate, are antiseptic of dead flesh.

I apprehend nitre is never used in putrid diseases in any of our hospitals; and there are many instances of its bad effects in putrid fevers, where the disease was mistaken; and I think no good can be expected from it in putrid disorders of any kind, though an effectual antiseptic of dead flesh; which power, I suppose, it has by preventing the effect of the air upon what it is applied to.

Meat keeps sweet longer or shorter in proportion as the weather is hot or cold, and this must happen from the different effect of the air. In frosty weather meat keeps very long sweet; salt or nitre preserves it also in hot weather, and yet neither prevents or cures putrefaction in a living creature.

The heat and circulation in a living body, as it preserves it from putrefaction, so it prevents any cooling antiseptic from being of use, if it is attacked by putridity; because the heat can never be reduced in a living creature



ture to such a degree as that cooling antiseptics can have any effect as such; but on the contrary, as they tend to sink and enfeeble the habit, already weakened and oppressed by the putrid taint, they thus promote the putrefaction; not by coinciding with, or assisting the putrefactive principle itself, but by reducing the natural heat of the body, and strength of the circulation, by which the putridness is opposed, and life preserved.

The putrefactive principle has naturally greater power when the *vis vitæ* is weakened, in the same manner as sickness, or any thing that diminishes the strength of a garrison, aids the enemy, tho' not by immediately assisting, but by weakening the power of the defenders of the fort, it is no doubt sooner and easier destroyed by the besiegers.

HUXHAM, FOTHERGILL, PRINGLE, and SHEBBEARE, gentlemen whose names I mention with the greatest deference and respect, as physicians of the first eminence, have all wrote on putrid diseases, and I think have not at all spoke in favour of nitre, or any cooling things in such disorders, nor has either of them accounted for the different effects of  
nitre

nitre upon living and dead subjects, as to its antiseptic quality, which is what I want to see made out; and I think there is not a greater or more useful subject in physic, than the distinguishing of putrid diseases, and the true nature of putrefaction, in living creatures.

BOERHAAVE surely must be wrong in accounting for putrefaction being occasioned by an increased degree of heat, or it would happen in all ardent diseases, where the heat is often encreased so much beyond the state of health; and it is well known that fevers happen and continue several weeks with great violence, without occasioning the least degree of putridity.

And I think there are sufficient cautions against using evacuants, nitrous, or any cooling medicines in putrid diseases, in Dr. FOTHERGILL's treatise on the putrid fore throat, and in SHEBBEARE's physic, where he speaks of a putrid fever in the French army at Prague, and hardly any surviving the use of evacuants and cooling medicines; and if the trifling quantity of a few grains of nitre swallowed in twenty-four hours, was observed to be so mischievous

chievous by these gentlemen, as too many melancholy proofs happened, especially in the putrid sore throat, to doubt of its bad effects, surely the most fatal consequences may be apprehended from pursuing Mr. ALEXANDER's advice, of throwing ounces instead of grains of this medicine, into the blood of a person in a putrid disease, unless we can suppose such a large quantity of this antiseptic will effectually destroy the putrid taint, and prevent any further corruption of the humours to this dangerous state.

But this happy consequence, I fear, we have no reason to hope for, but that as the small quantity of nitre swallowed is capable of doing so much harm in such cases, the bath use of it will do more harm, in proportion to the quantity received into the blood; for I suppose nitre is not at all antiseptic in a living body, nor septic; the circulation and heat, that must be to maintain life, prevents its antiseptic quality; and was it septic, a free use of it would occasion putrid diseases, which is not the case; but it does harm in such disorders, by its sinking and enfeebling the natural strength of the habit, impoverishing the blood,



blood, and reducing the strength of the circulation; all which dismal consequences happen from the putrefactive principle itself; and any medicine that acts analagous to the putrid taint, must give it an opportunity of making a speedier progress and corruption of the humours.

When a putrid taint has obtained in a habit to any considerable degree, it occasions a great languor and dejection of spirits, a stupor of the senses, or moping delirium, pain of the head, and want of rest, a heaviness of the eyes, and a remarkable stupid \* dejectedness appears in the whole countenance, great tremblings, especially if the patient attempts to sit up, a quick and weak pulse, an offensive smell of the breath, sweat, and stools.

Perhaps the antiseptic quality of nitre consists chiefly in its coldness, being much colder than the air, in the coldest season and climate; and any thing that differs from the qualities of the air proves antiseptic of dead flesh; thus acids and alkalis, hot and cold, bitter and

\* Easily distinguished from that sign of ill luck that is hung in the face by grief and uneasiness.

and sweet things, are antiseptics; but nothing perfectly insipid, as water and earth, is antiseptic.

Of heat and cold is to be understood such things as have those native qualities, and are not altered by the weather; as the warm spices preserve their native heat, and nitre its cold quality alike, through all vicissitudes of weather. But whether nitre is antiseptic or not in a living body, it is enough to forbid its use in putrid diseases; to know it enfeebles the habit and circulation, by which alone we are preserved from putrefaction.

It has been said, I think, we are preserved from putrefaction by the antiseptics we swallow with our food. But that is not the case; many animals living without swallowing any thing we know of an antiseptic quality.

To circulation we owe our security from putrefaction; to circulation, indeed, we owe our being; by circulation our life is continued: nay without it, the very air itself, the breath of life, would become so putrid, that instead of its being fit for the purpose of respiration,

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it would poison our bodies; and the animal world, excepting maggots, would soon be destroyed by those little reptiles that live and thrive amidst the highest degree of putrefaction.

Again, it may be objected against the use of nitre in putrid diseases, that the putridness that infects a living creature is always of such a high degree, that nitre has not power to remedy or oppose it.

ALEXANDER himself says, there is a degree of putrefaction, in dead flesh, that no antiseptic removes, or prevents from further corruption; but nitre, by preventing the first state of putrefaction in flesh it is applied to, a higher or infectious degree of putrefaction cannot happen to it, as that can only be produced by continued corruption by degrees, and the most simple and least change must happen first: but if nitre sufficient is not used to prevent the first change, the putrefaction will proceed, though more slowly, to as high a degree as if no nitre had been used to the putrifying substance; and the putrefactive principle that occasions a putrid fever, whether it be some putrid effluvia received, or whether it arises from stagnant humors in the body, must be so highly putrid



putrid as to act as a poison, and be infectious; and putrefying flesh undergoes many degrees of putrefaction before it can infect a living creature with putridity by its effluvia, or being swallowed.

Dogs will eat great quantities of stinking meat without being injured by it; but when it arises to the infectious state, it is of an alarming offensive odour, and no animal will eat it; and as nitre has no power to subdue or suppress so high a degree of putrefaction, it can never be good any how used in a putrid disease.

The same I would suspect of all cooling attenuants, vegetable acids not accepted. Cordial invigorating medicines then, as at the same time they are antiseptic, they preserve or improve the crasis of the blood and humors, support and strengthen the circulation, and thus at once oppose the progress of the putrefaction, and assist nature in discharging the putrid taint already received, must be ever the medicines proper in putrid fevers; and these are so agreeable to the stomach, that the great advantage Mr. ALEXANDER speaks of, of the

external use of antiseptics in putrid diseases, of throwing greater quantities of antiseptics into the blood by that means in a little time, than can be swallowed, is of no consequence, as a sufficient quantity mostly of such medicines can easily enough be swallowed and retained; and I think their having a much better effect so than by any external use cannot be doubted, as they will much more promote perspiration, a state of the patient greatly to be endeavoured for, as by that evacuation the separation and discharge of the offending matter is chiefly to be made.

The bark then, however effectual an antiseptic, and in strengthening and improving the constitution, is cautiously to be used, lest it obstruct perspiration, especially in the beginning of the disease, and which Mr. ALEXANDER'S external use of the bark, I think, would be most likely to do.

Respecting the power such medicines have in the bath, or dry external use, of entering the pores of the skin, and getting into the blood, this gentleman has taken a good deal of pains to prove, what I suppose no one doubted

doubted of, the use of worm plaisters, being very old and common, and efficacious remedies.

The external use of the bark is no doubt a very useful improvement in physic, especially for young children, who cannot be got to swallow it; but I think we were taught this some years ago, in the Medical Observations and Enquiries, and given a great many instances of success by Dr. PYE.

A low enfeebled state of health may happen from relaxation from many causes; as for want of sufficient nourishment, or of what is good in quality; from a continued damp heavy atmosphere, or a continued use of such things as cool the body, and impoverish the blood too much, as nitre, volatile salts, or opium.

But here is only the weak enfeebled state, the juices remaining pure, the animal œconomy, one may say, is undisturbed, the pulse, though low and feeble, is not accelerated; the flesh is cool, and the senses are clear.

But if a putrid taint prevails to such a degree as to be destructive of the circulating juices,  
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the animal œconomy is disturbed, in proportion to the degree of infection, and nature seems alarmed at her danger, the pulse is quick and weak, the flesh is hot too, as mentioned in describing the system of a putrid disease; and as the disease gets ground, the patient becomes more and more insensible of his danger; and is sometimes, a few days before his death, so entirely stupid, that he will say he is pretty well, and he thinks recovering apace.

Indeed I think, that after the fever has continued some time, a remission of the symptoms sometimes appears, so as to deceive the physical attendants, if they are not very attentive, and well aware of the nature of the disease; for if it has been mistook for an inflammatory fever, they will naturally suppose matters mending, if the pulse become somewhat quieter, and the flesh cooler; when perhaps this seeming amendment may happen from the destruction of the patient being almost compleated, by the progress of the disease, and nature's being so overcome, that her efforts are very feeble, the pulse is very low and weak, but I think not slower, tho' the patient

patient is cooler, and so the fever may seem to be abated.

But if the senses are not clearer, and the aspect of the patient in particular more promising, there is little room to hope for amendment, though the sick may think himself, or rather not being capable of thinking at all, or judging of his own condition, may say he is better, as in the unhappy conclusion of an inflammation in the bowels; when the mortification is begun, the patient will be easier, chearful, and otherwise seemingly better, tho' within a few hours of his death; and after a putrid fever had continued about a fortnight, I have known the poor victim to be thought so much better, as to be suffer'd and be able to get up, and walk about, and indeed out into the air; but yet, upon careful observation, no amendment, I think, appeared, as the patient, though able to walk, and would say he was better, was extremely weak, giddy, stupid, and reeled and totter'd as he moved, the pulse was very quick, low and weak, and the aspect of the countenance remarkably stupid and destroyed, and in a day or two a large quantity of extremely putrid blood ran off by stool,

stool, the patient became worse, and again confined to the bed ; and now other marks of the malignity of the disease appeared, as livid spots, &c. the patient became extremely light-headed; perhaps from the putrid acrimony ravaging the brain, and soon died.

Dr. SHEBBEARE speaks of intermittents from a putrid cause, and perhaps the disease may appear so from the putridness affecting chiefly the bile, or its being in a less degree than when the fever is continual ; and I think such intermittents are best and readiest cured by cordial alexipharmics. The bark will generally soon throw the patient into a continual fever, or if it does not, but seems to put by the fits, for a time, they will be apt to break out again with greater violence, or to torment and deceive the patient with uncertain, irregular paroxysms, till it almost unexpectedly robs him of his life.

Putrid intermittents may be distinguished from agues and other intermittents by symptoms of putridity already mentioned, and the shiverings or cold fits being of a very short duration, perhaps but for a few moments, and the



the succeeding hot fit continuing long, and not going off with a profuse kindly sweat, as in common intermittents.

And Dr. SHEBBEARE himself, though he seems inclined soon to enter on the use of the bark; depends greatly on perspiration in the fit. When the heat and sweat succeed the shivers, says he, the patient should be kept in bed, and sweated with wine whey, to assist nature in a more perfect discharge of the offending cause.

And a little further; it appears necessary that warm alexipharmics, and invigorating medicines should be taken, that the contagious principle should be pushed through the skin; as soon as possible, and the fluids left in a state of less danger of bringing on a relapse of the former disease.

And as the great end is a separation and discharge of the putrefying cause, and this is chiefly to be made through the pores of the skin, I think it would be more readily and effectually done without the bark, as that medicine certainly is a checker, and not pro-

moter of the discharge by the skin; and I have known the early use of bark presently change this intermitting disorder to continual, and by forbearing the use of the bark, and giving only cordial alexipharmics, the patient has recovered.

But if, through neglect of the patient, or mistake of the attending party, the disease is far advanced, and the corruption of the blood and juices greatly affected, the immediate use of the bark may be necessary, as perhaps nothing is equally efficacious in preserving and improving the texture of the blood, and keeping up the circulation.

The opinion of most, that the digestion of our food, and the change which aliments undergo in passing the intestinal tube, is a degree of putrefaction, (being wrong) as SHEBBEARE says, I think is very evident from the difference of the odour of a putrid and sound stool: and a putrid state never is begun in any thing, but it encreases, unless prevented, to the highest degree the substance is capable of; and the stool of a person in health, after it has lain in  
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the gut several days, is no more putrid than if it had been voided as soon as separated.

There can be no small advantage in putrid diseases, in carefully airing the room, as Mr. ALEXANDER advises; and to that we would add the caution of often changing the cloaths of the sick, the linnen, and what is next the body especially, as sheets, &c. taking care that the fresh linnen, and other cloaths, are thoroughly dry.

The utility or noxious property of Mr. ALEXANDER'S method of treating putrid diseases, might be proved to conviction and demonstration, could the disease be produced at will, as in this unlucky country there are always plenty of forfeited lives that might be turned to that purpose.

The disease being produced, and as near as may be appearing in equal degrees of strength in a number of such subjects, let one be doomed to the fatal trial of the nitrous bath; let another try the internal use of nitre; a third the taking freely of vegetable acids; the fourth and last, cordial invigorating medicines: and that a



matter of so great and nice concern may not remain in any doubt, it may be necessary to make the experiments again and again; and as I think three fourths of the lives would have little better chance of surviving these experiments than they would the use of the halter, I think they should take this allotment by the fair chance of balloting.

Perhaps the experiments may be made with nearly equal certainty upon brutes; and, perhaps, the forcing of dogs to swallow a quantity of highly putrid flesh would give them a putrid disease. Would that be the case, and answer the purpose, I would make the experiments the first moment I had leisure and a convenient opportunity.

Unluckily, I think, Mr. ALEXANDER has made the same mistake in his essays on the doses and effects of medicines he made in his experiments on the use of nitre in putrid diseases, i. e. he has made no fair trial at all: for I suppose there can be no proof made of the power any medicine has of doing good in a disease, but by the use of it in that particular disorder in which it is recommended as useful.

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But Mr. ALEXANDER, to try the utility or uselessness of castor in nervous and hysterical cases, has taken it himself, (a robust, hale man, I suppose, from the quantity of nitre he was able to bear) and has found great fault with castor, and declared it a useless part of the materia medica, for no other reason, that I can conceive, but because it did not make him ill when he took it in full health.

It must be observed, that the constitution of a man in health, will bear great excesses in eating and drinking, and of exercise, without injury, therefore a dose of castor cannot affect him; and was it capable, under such circumstances, of increasing the heat of his flesh, and motion of his blood, to me it appears evident, upon the very same principle, that a person in health could not walk a turn or two round a room, without such motion throwing him into a fever: But the matter is so happily, so widely different, that a man in health can eat a hearty meal of high seasoned meats, and with it drink half a gallon of wine, without apparent injury; he will bear strong, or, perhaps, violent exercise all day, or dance a whole night, without being dis-



disordered: But if the same person is ill, if he has a fever on him, though not in a great degree, he may not be able to drink two glasses of wine, without its manifestly increasing his disorder: He cannot, with any ease, bear the least motion; instead of being able, as he is in health, to ride hard all day, he cannot even get on horseback but with trouble and fatigue; and as so small a proportion of such things, to what a person will bear in health, will do him harm, so will a medicine, that does not seem to affect him at all when well, be of great assistance towards his recovery from a disease. Therefore I look upon Mr. ALEXANDER's trials of castor and saffron upon himself as not the least shadow of a proof of their being useless in medicine, any more than a person's wrapping himself up in great coats and warm furs here, in the month of July or August, would give him a feeling proof of the comfortableness and great necessity for the use of such things in the cold regions of Spitzbergen, or any extreme northern climate; and was it so, he has the same plea against the utility of the greatest part of the Apothecary's shop, even the Peruvian Bark, Valerian, Musk, and Opium.

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Any one of a tolerable strong habit in health may take as much bark without its any how affecting him, as will cure him of an intermitting fever. A beef-eater in health will swallow six drams, or an ounce, of valerian in a day, without its doing him either good or harm; when a sixth of the quantity will greatly relieve the nervous valetudinarian. Two or three drams of musk may be taken by a person in health in a day, without his being either better or worse for it; but yet I suppose its great use in medicine, especially in convulsive disorders, no one will be obstinate enough to dispute, as without mentioning a thousand instances that happen almost daily, or searching for such others as may be upon record, there is a late most convincing clear one in the third volume of Medical Observations and Enquiries, in the case of a lady at Shrewsbury, under the care of Dr. OWEN.

A sound and long sleeper may take a dose of laudanum going to bed, and declare in the morning it is of no use in medicine, nor has any soporific quality belonging to it, because he slept equally well the night before when he did not take any, and prohibit the medicinal use of it, with as much shew of reason, as

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Mr. ALEXANDER has for the utility of nitre, in putrid diseases, or against the utility of castor and saffron in any diseases; but then what will be done for a person losing his life through an excessive intestinal discharge? without opium, what ease will be procured to the wracked with agonizing pain?

To satisfy myself of the truth of what I have said respecting a person in health taking a quantity of bark, or valerian, without being materially affected by it, I gave a man, about sixty years of age, and not of a very robust constitution, six drams of the best bark, fresh powdered, in a day, and neither the heat of his flesh, nor motion of his blood, was greater, when he had finished it, than when he took the first dose; the next day but one the same person took six drams of valerian, newly powdered, at six doses in a day, and it neither increased the heat of his flesh, nor quickness of his pulse: I would also have tried the musk, but had not then an opportunity on account of its smell being so extremely disagreeable to many people.